



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,072	11/29/2000	Brian Jemes	10002170-2	8678

7590 11/07/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NGUYEN, MINH DIEU T

ART UNIT PAPER NUMBER

2137

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/726,072

Applicant(s)

JEMES ET AL.

Examiner

Minh Dieu Nguyen

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 34-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This office action is in response to the communication dated August 28, 2006 with the amendments to claims 1 and 17, the cancellation of claims 34-47 and the addition of claim 48.
2. Claims 1-33 and 48 are pending.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-33 and 48 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

4. Claims 1 and 48 are objected to because of the following informalities:
  - a) As to claim 1, "a first bubble" should be "a first network bubble"; "a second bubble" should be "a second network bubble".
  - b) As to claim 48, "the devices" should be "the network devices".

Appropriate correction is required for consistency and clarity.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2137

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **1-8, 10, 13-14, 17, 21-25, 27-30 and 33** are rejected under 35

U.S.C. 103(a) as being unpatentable over Nessett et al. (5,968,1760) in view of Segal (6,345,299) and further in view of Williams (6,304,973).

a) **As to claim 1**, Nessett discloses a computer network security system comprising: a plurality of network bubbles (Fig. 6, elements 600, 610), each network bubble having a plurality of bubble partitions (Fig. 6, elements 601-603), each bubble partition having at least one network device (Fig. 6, element NIC in systems 601-603) configured to transmit and receive data, and all of the network devices corresponding to the same respective network bubble having the same network security policy (col. 22, lines 14-17) and a network control point having one or more network control point devices, a first network device of a first bubble being connected to the network control point through at least one network control point device and a second network device of a second bubble being connected to the network control point through at least one network control point device (Figure 6, elements 606, 607 and 615). Nessett does not expressly disclose all of the network devices corresponding to at least one of the plurality of network bubbles have unrestricted network access with each other. Segal is relied on for the teaching of all network devices corresponding to at least one of the plurality of network bubbles have unrestricted network access with each other (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having all network devices corresponding to at least one of the plurality of network bubbles have unrestricted network access with each other in the

system of Nesset, as Segal teaches so as to allow network devices in the network bubble to have unrestricted network connectivity with each other. Nesset and Segal do not specifically disclose the network control point applies the security policy of the first bubble to data for the first network device and the security policy of the second bubble to data for the second network device. William discloses a network control point having one or more network control point devices, a first network device of a first bubble being connected to the network control point through at least one network control point device and a second network device of a second bubble being connected to the network control point through at least one network control point device (see Williams Fig. 14), William is relied on for the teaching of the network control point applies the security policy of the first bubble to data for the first network device and the security policy of the second bubble to data for the second network device (see Williams col. 26, lines 2-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of the network control point applies the security policy of the first bubble to data for the first network device and the security policy of the second bubble to data for the second network device in the system of Nesset and Segal, as William teaches so as to enforce policy required at each network, not a one-size-fits-all security policy.

b) **As to claims 2 and 23**, Nessett fails to disclose a secure network further comprising a plurality of inter-bubble devices.

Williams discloses a multi-level security network system further comprising a plurality of inter-bubble devices, each inter-bubble devices is configured to connect at

Art Unit: 2137

least two of the plurality of network bubbles to one another and to enforce the network security policy of each of the plurality of network bubbles that the inter-bubble device is connected to (col. 26, lines 27-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of inter-bubble devices, as Williams teaches, in the system of Nessett and Segal so as to reduce network latency.

c) **As to claims 3 and 24**, Nessett, as modified discloses the secure network wherein each of the plurality of bubble partitions that belong to the same bubble has the same network security policy applied at each of the plurality of network control points that are connected to the plurality of bubble partitions (col. 22, lines 14-31).

d) **As to claims 4, 10, 25 and 30**, Nessett fails to disclose network devices in different bubble partitions of the same network bubble has unrestricted network connectivity.

Williams discloses each of the plurality of bubble partitions has unrestricted network connectivity to all other bubble partitions within the same bubble (col. 13, lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of unrestricted network connectivity to all bubble partitions within the same bubble, as Williams teaches, in the system of Nessett to increase throughput.

e) **As to claims 5 and 27**, Nessett, as modified discloses DNS is used to translate hostnames to IP addresses and IP addresses to hostnames (col. 7, line 64). It is inherently understood that each of the plurality of bubble partitions is defined by an address range.

f) **As to claims 6 and 28**, Nessett, as modified discloses the secure network wherein each of the network devices in each of the plurality of bubble partitions has an address contained within the address range (col. 7, lines 56-65).

g) **As to claims 7 and 29**, Nessett, as modified discloses the secure network wherein each address exists in only one of the plurality of bubble partitions (col. 8, lines 57-65).

h) **As to claims 8 and 21**, Nessett, as modified discloses the secure network wherein each of the plurality of network control points ensures source address integrity at each bubble boundary (col. 11, lines 54-62).

i) **As to claims 13 and 22**, Nessett, as modified discloses the secure network wherein each network device connects to only one network control point (Fig. 6, elements 601, 604).

j) **As to claim 14**, Nessett, as modified discloses the secure network wherein the total number of network control points is greater than the number of network control points connected to any one particular bubble partitions (Fig. 6).

k) **As to claim 17**, Nessett discloses a secure network comprising a first and a second network bubble (Fig. 6, elements 600 and 610), each network bubble having a distinct network security policy and a plurality of bubble partitions, each bubble partition

having a plurality of network devices (Fig. 6, element NIC in systems 601-603) configured to transmit and receive data and a plurality of network control points (Fig. 6, elements 608, 615) connecting the first network bubble to the second network bubble, each network control point having one or more network control point devices (Fig. 6, elements 606, 607, 614), and a network control point having one or more network control point devices, a first network device of the first network bubble being connected to the network control point to which a second network device of the second network bubble is also connected (Figure 6, elements 606, 607 and 615). Nessett does not expressly disclose each bubble partition having a plurality of network devices having unrestricted network access with each other. Segal is relied on for the teaching of each bubble partition having a plurality of network devices having unrestricted network access with each other (Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of each bubble partition having a plurality of network devices having unrestricted network access with each other in the system of Nessett, as Segal teaches so as to so as to allow network devices in the network bubble to have unrestricted network connectivity with each other. Nessett and Segal do not specifically disclose the network control point device applies the distinct security policy of the first bubble to data for the first network device and the distinct security policy of the second bubble to data for the second network device. William discloses a network control point having one or more network control point devices, a first network device of the first network bubble being connected to the network control point to which a second network device of the second network bubble is also connected



Art Unit: 2137

(see Williams Fig. 14). William is relied on for the teaching of the network control point applies the distinct security policy of the first bubble to data for the first network device and the distinct security policy of the second bubble to data for the second network device (see Williams col. 26, lines 2-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of the network control point applies the security policy of the first bubble to data for the first network device and the security policy of the second bubble to data for the second network device in the system of Nesset and Segal, as William teaches so as to enforce policy required at each network, not a one-size-fits-all security policy.

l) **As to claims 4, 10, 25 and 30**, Nessett fails to disclose network devices in different bubble partitions of the same network bubble has unrestricted network connectivity.

Williams discloses each of the plurality of bubble partitions has unrestricted network connectivity to all other bubble partitions within the same bubble (col. 13, lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of unrestricted network connectivity to all bubble partitions within the same bubble, as Williams teaches, in the system of Nessett to increase throughput.

m) **As to claim 33**, Williams, as modified teaches a secure network further comprising an interbubble device (Fig. 14, element 18) connected to the first network bubble and the second network bubble without being connected to the plurality of

Art Unit: 2137

network control points and configured to enforce the network security policy of the first and the second network bubble (col. 26, lines 12-59).

7. **Claims 9, 11-12, 15-16, 18-20, 26, 31-32 and 48**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. (5,968,176) in view of Segal (6,345,299) in view of Williams (6,304,973) and further in view of Wesinger, Jr. et al. (6,052,788).

a) **As to claims 9 and 26**, Nessett does not disclose each of the bubble partitions is connected to at least two network control point devices.

Wesinger discloses the secure network wherein each of the plurality of bubble partitions is connected to at least two network control point devices to achieve high availability in the case of a failed interface or network control point device (col. 12, lines 19-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of connecting each bubble partition to at least two network control point devices in the system of Nessett, Segal and Williams as Wesinger teaches to ensure the high availability in case of a failed interface or network control point device.

b) **As to claims 11 and 31**, Wesinger, as modified discloses the secure network wherein the plurality of network control points are coupled to one another and form a virtual backbone that is external to all of the plurality of network bubbles (Fig. 1, elements 107, 157).

c) **As to claims 12 and 32**, Wesinger, as modified discloses the secure network wherein each of the plurality of network control points ensure source address integrity across the virtual backbone (col. 1, lines 51-67 to col. 2, lines 1-13).

d) **As to claim 15 and 18**, Wesinger, as modified discloses the secure network wherein all data transmitted from one network device to another network device traverses only one network control point (col. 3, lines 19-21).

e) **As to claims 16 and 19**, Wesinger, as modified discloses the secure network wherein all data transmitted from one network device to another network device traverses only two network control points (col. 3, lines 21-22).

f) **As to claim 20**, Wesinger, as modified discloses the secure network wherein all data transmitted from one network device in the first network bubble to another network device in the second network bubble traverses more than two network control points (col. 7, lines 37-40).

g) **As to claim 48**, Wesinger, as modified discloses at least two of the plurality of bubble partitions associated with the first bubble are in different geographic locations (col. 6, lines 27-33), wherein each partition connects to a different network control point device which enforces the security policy of the first bubble for the devices in the respective partition (see addressed claim 1).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2137

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
mdn  
11/1/06

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER